Ministry of Energy, Mines & Petroleum Resources
Mining & Minerals Division
BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geological Geophysical

TOTAL COST: $9,276.50

AUTHOR(S): Laurence Sookochoff, PEng

SIGNATURE(S): Laurence Sookochoff 2017.11.26 21:29:59 -08'00'

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

YEAR OF WORK: 2017

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5635531 January 29, 2017

PROPERTY NAME: Tom Cat

CLAIM NAME(S) (on which the work was done): 1049441

COMMODITIES SOUGHT: Copper Gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Nicola

NTS/BCGS: 092H.088 092H.098

LATITUDE: 49 ° 57 ' 45 " **LONGITUDE:** 120 ° 33 ' 59 " **(at centre of work)**

OWNER(S):
1) Sierra Iron Ore Corporation
2)

MAILING ADDRESS:
132366 Cliffstone Court
Lake Country BC V4V 2R1

OPERATOR(S) [who paid for the work]:
1) Sierra Iron Ore Corporation
2)

MAILING ADDRESS:
132366 Cliffstone Court
Lake Country BC V4V 2R1

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
Pleistocene-Holocene, Alkalic Volcanics, Triassic, Nicola Group, Eastern Volcanic Facies, Basalt, Cross-Structures

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 24041, 28782, 29728, 35063, 36013

Next Page

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation	145 hectares	1049441	$ 6,000.00
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	2.5	1049441	3,276.50
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for...)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	$ 9,276.50

SIERRA IRON ORE CORPORATION

(Owner and Operator)

GEOLOGICAL & GEOPHYSICAL

ASSESSMENT REPORT

(Event 5635531)

Work done on Tenure 1049441

(from January 24,2017 to January 29, 2017)

of the five claim

TOM CAT 1049441 CLAIM GROUP

Nicola Mining Division

BCGS 092H.088/.098

British Columbia, Canada

Centred Near:

5,537,290 N, 674,538 E
(10 NAD: 83)

Author & Consultant:

Laurence Sookochoff, PEng.
Sookochoff Consultants Inc.

Submitted

November 25, 2017

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SUMMARY

The five claim, 1,934 hectare Tom Cat 1049441 Claim Group ("Property") is located 203 kilometres east-northeast of Vancouver within the historic Aspen Grove of south-central British Columbia. The Property is situated within a northerly belt of Mesozoic rocks from the US border in the south to the Yukon border to the north, which host such major porphyry mineral resources at Copper Mountain to the south and at Highland Valley to the north. The dominant mineral controlling feature at these productive mines is a central cross-structure.

At Copper Mountain, the Main Fault, a structure within a band of Nicola volcanics between two intrusives, is the dominant structure for the intersecting cross-structures controlling most of the productive mineral deposits (Figure 12).

At the Big Kidd prospect *(Minfile 092HNE074),* cross-structures are indicated as the mineral control to the 300 metre wide breccia zone where a 71 metre drill intersection of 0.75 grams per tonne gold and 0.2 per cent copper was reported.

At the Tom Cat Property, the geology is favourable to the occurrence of a porphyritic mineral resource comparable to the Copper Mountain type resources. The structural preparedness/controls for a mineral resource within the volcanic rocks on the Property could have been initiated by major structures and/or splays comparable to the adjacent regional Kentucky-Alleyne fault system. Intrusives to generate a mineralizing system are shown adjacent to, and indicated, on the Property.

The results of the structural analysis of Tenure 1049441, one of the five claims comprising the Property, have revealed that the Property may cover an area of mineral controlling cross-structures and/or cross-structures where maximum fracture and/or breccia and/or breccia pipe development should occur, which could also be the most favorable locations for the conduit and deposition of any hydrothermal fluids that may be sourced from a buried intrusive.

The results of the localized magnetometer survey, which incorporated cross-structure "C", one of the four delineated cross-structures, revealed two possibly hydrothermally altered structures which parallel the structural pattern of structures that formulated cross-structure "C" and which include localized anomalous magnetometer LO's which may be the locations of maximum brecciation and hydrothermal alteration. The approximate location of cross-structure "C" is generally correlative with two indicated localized anomalous mag LO's.

As the location of cross-structure "C" is only approximate and the magnetometer values are only relative, both due to variable factors, the designated UTM location *(Table II)* would only be target to begin exploration of possibly a general 100 square meter area with the total area guided by the progressively positive initial field results for geological indicators to a concealed mineral resource. These geological indicators may be revealed as pathfinder minerals, minerals and/or alteration products that would be subject to interpretation as economic mineral indicators.

Thus, the priority locations for exploration within Tenure 1049441 would initially be the area of cross-structure "C", followed by the exploration of cross-structural locations "A", "B", and "D".

INTRODUCTION

Between January 24 and January 29, 2017 an exploration program comprised of a structural analysis and a localized magnetometer survey was completed on Tenure 1049441 of the five claim Toni 1049441 claim group. The purpose of the program was to delineate potential structures and correlative magnetic responses which may be integral in indicating near surface indications and/or geological controls to a potential concealed mineral resource.

Information for this report was obtained from sources as cited under Selected References.

Figure 1. **Location Map**
(from MapPlace)

PROPERTY LOCATION and DESCRIPTION

Location

The Property is located in the Nicola Mining Division of British Columbia Canada, 203 kilometres east-northeast of Vancouver and 25 kilometres southeast of Merritt within BCGS maps 092H.088 and 092H.098.

Description

The Property consists of five contiguous claims totalling 1934.2966 hectares. Particulars are as follows:

Table 1. **TOM CAT 1049441 CLAIM GROUP TENURES**
(from MtOnline)

Tenure Number	Type	Claim Name	Good Until*	Area (ha)
1015178	Mineral	TC1281	20170724	270.3828
1018452	Mineral	NAA1	20170724	540.8326
1029593	Mineral	TC1	20170724	520.2206
1031274	Mineral	POTHOLE LAKE NORTH	20170724	457.3688
1049441	Mineral		20190124	145.4918
				Total Area: 1934.2966 ha

**On the approval of this assessment report*

Figure 2. **Property Location**
(Base Map from Google Earth)

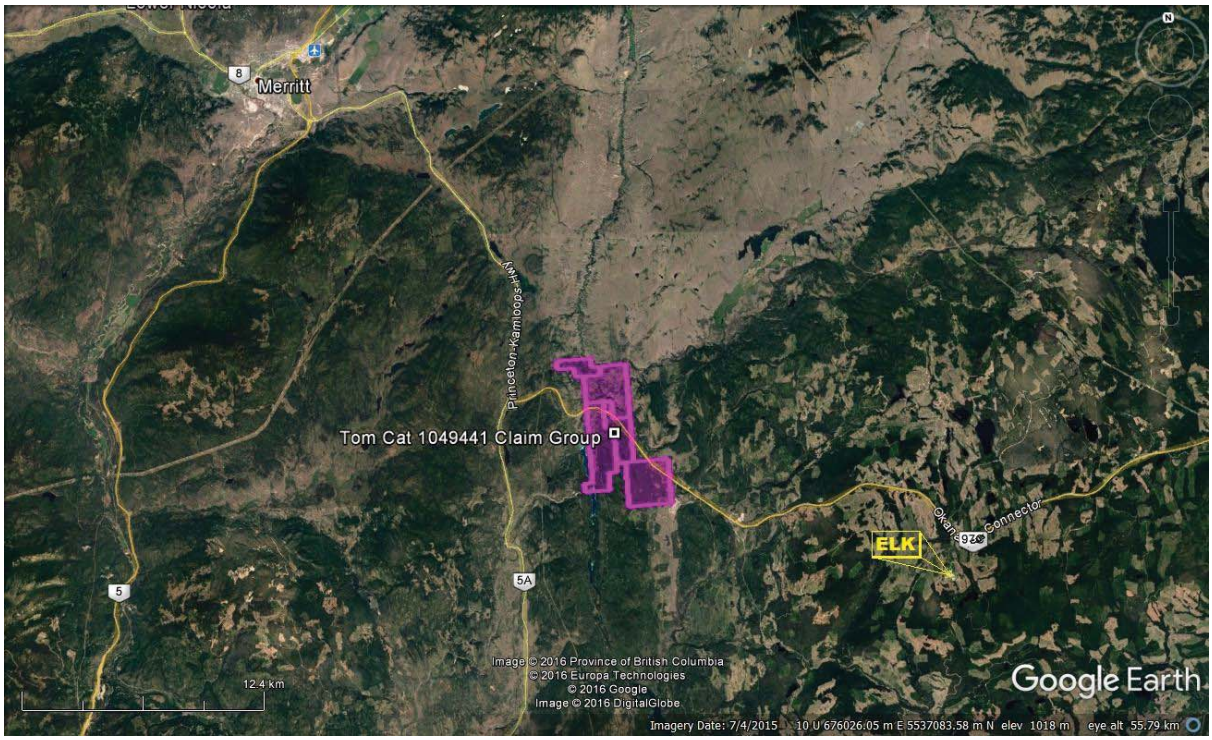
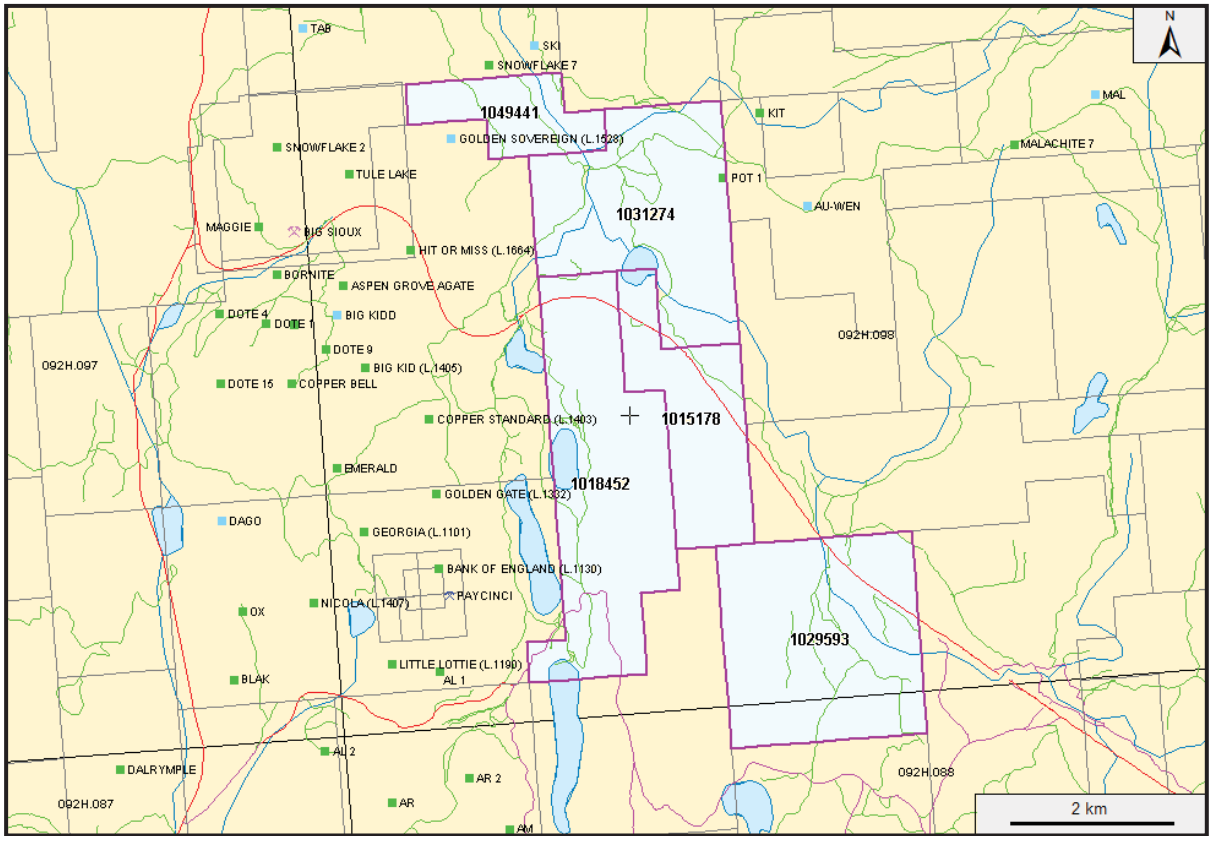


Figure 3. **Claim Map**
(base map from MapPlace)



ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

Access

Access from Merritt is for four kilometres southeastward to the junction between Highways 5 and 5A; thence via Highway 5A southward for 24 kilometres to the junction between Highways 5A and 97C or the Aspen Grove junction; thence east via the Okanagan Connector for five kilometres to the eastern border of Tenure 1018462 of the Tom Cat 1049441 Claim Group.

Climate

The region is situated within the dry belt of British Columbia with rainfall between 25 and 30 cm per year. Temperatures during the summer months could reach a high of 35° and average 25°C with the winter temperatures reaching a low of -10° and averaging 8°. On the Property snow cover could be from December to April which should not hamper a year-round exploration program.

Local Resources and Infrastructure

Merritt or Kamloops, historic mining centres, could be a source of experienced and reliable exploration and mining personnel and a supply for most mining related equipment. Kamloops is serviced daily by commercial airline and is a hub for road and rail transportation. Vancouver, a port city on the southwest corner of, and the largest city in the Province of British Columbia, is four hours distant by road and less than one hour by air from Kamloops.

Physiography

Within Tenure 1049441 the topography is of predominantly gentle to moderate sparsely forested slope. Elevations range from 880 metres within a valley along the eastern portion of the northern boundary to 1,140 metres on a knoll along the westernmost portion of the southern boundary.

HISTORY: PROPERTY AREA

The history on some of the more significant mineral MINFILE reported occurrences, prospects, and past producers peripheral to the Tom Cat 1049441 Claim Group is reported as follows; the distance is from the Tom Cat 1049441 Claim Group.

TOM CAT prospect (Volcanic redbed-Cu; Subvolcanic-Cu-Ag-Au (As-Sb);
Porphyry Mo (Low F-type)
MINFILE 092HNE056
Five kilometres south-southwest

The occurrence was initially prospected and trenched by W. Murray between 1906 and 1913. Pyramid Mining Company Ltd. drilled 13 holes totalling 1042 metres in 1965.

GOLDEN SOVEREIGN prospect (Volcanic redbed Cu)
MINFILE 092HNE072
100 metres south

The Golden Sovereign prospect is centred 900 metres east of the south end of Tule Lake and 4.5 kilometres northeast of Aspen Grove.

The prospect was periodically explored between 1900 and 1913. Nine tonnes of ore grading 5.0 per cent copper were mined in 1916, likely from the high-grade shear zone on the Golden Sovereign claim (Lot 1528). Snowflake Mining Company Ltd. examined the occurrence in 1981.

History: Property Area *(cont'd)*

BIG SIOUX past producer (Volcanic redbed Cu; Alkalic porphyry Cu-Au)
MINFILE 092HNE073
Four kilometres west

This deposit was one of the first showings to be explored in the Aspen Grove copper camp. It was staked in 1899, and investigated periodically by H.H. Schmidt up to 1914. One shaft, 10 metres deep, an adit, 46 metres long, and numerous pits and trenches were excavated during this time. Forty-four tonnes of ore were shipped in 1918 grading 9.78 per cent copper and 67.9 grams per tonne silver. David Minerals Ltd., Amax Exploration Inc. and Norranco Mining and Refining completed soil and rock geochemical and geophysical surveys over the deposit between 1968 and 1978.

The occurrence was restaked in 1989 after copper mineralization was exposed in a road cut along the north side of the recently completed Coquihalla Highway (Phase 3 - Okanagan Connector). The deposit was subsequently mapped and sampled by Amex Exploration Services Ltd. in 1990, Northair Mines Ltd. in 1991 and Placer Dome Inc. in 1992. Christopher James Gold Corp. drilled the area, including the Big Kidd (092HNE074) in 1997

BIG KIDD prospect (Volcanic redbed Cu; alkalic porphyry Cu-Au)
MINFILE 092HNE074
Three kilometres west

The Fairweather Hills region is underlain by the Central volcanic facies of the Upper Triassic Nicola Group, comprising intermediate, feldspar and feldspar augite porphyritic ash flows, and associated alkaline intrusions.

The intrusions vary from diorite to monzonite in composition and are thought to be comagmatic with the Nicola Group, ranging in age from Late Triassic to Early Jurassic.

Locally, the area is underlain by red and green laharic breccias, augite andesite porphyry and minor sediments of the Nicola Group (Central belt, Bulletin 69). The units generally strike north-northwest and dip east. This sequence is broken up into a series of tilted fault blocks trending north.

A vertical or subvertical breccia pipe, nearly circular in outline and about 300 metres wide, is developed in a body of fine- grained diorite, which may in part be recrystallized volcanics. The pipe consists of angular to subrounded clasts of volcanics, fine- grained diorite (microdiorite) and pinkish grey monzonite and syenomonzonite porphyry in a matrix of altered diorite intrusive material and finely comminuted rock. The fragments are 1 centimetre to several metres in diameter.

COPPER STANDARD showing (Volcanic redbed Cu)
MINFILE 092HNE079
Two kilometres west

The showing was explored in the early 1900s with the excavation of a 15-metres deep shaft, and a drift, 17 metres long, extending northwest from the bottom of the shaft. Cal Dynamics Energy Corporation completed soil and geophysical surveys over the old workings in 1978 and 1979.

GOLDEN GATE showing (Volcanic redbed Cu)
MINFILE 092HNE080
Two kilometres west

The Golden Gate showing is 1.9 kilometres northwest of the south end of Alleyne Lake and 3.15 kilometres east-northeast of the south end of Kidd Lake.

History: Property Area *(cont'd)*

PAYCINCI prospect (Volcanic redbed Cu)
MINFILE 092HNE084
Two kilometres west

The Cincinnatti deposit was first explored by the Bates brothers in the early 1900s. A number of trenches, and one adit 120 metres long, were excavated between 1899 and 1913. Payco Mines Ltd. and Alscope Consolidated Ltd. conducted geological and geophysical surveys, trenching and diamond and percussion drilling between 1963 and 1967. An additional 15 holes totalling 1000 metres were drilled by Gold River Mines and Enterprises Ltd. in 1973 and Sienna Developments Ltd. in 1979. The deposit was most recently sampled by Pacific Copperfields Ltd. in 1992. In 1998, Christopher James Gold Corp. optioned the property. Reserves are estimated at 1.8 million tonnes grading 1 per cent copper (Tom Schroeter, 1998).

ELK past producer (Intrusion-related Au pyrrhotite veins; Polymetallic veins Ag-Pb-Zn +/-Au; Au-quartz veins)
MINFILE 092HNE096
Fourteen kilometres east-southeast

From 1992 and 1995 (inclusive), 16,570 tonnes of ore were mined and milled and 1,518,777 grams (48,830 ounces) of gold and 1,903,000 grams (61,183 ounces) of silver recovered.

In 1996, Fairfield shipped all remaining stockpiles, estimated to contain 2700 tonnes and grading greater than 12 grams per tonne (Information Circular 1997-1, page 21). A total of 994 metres of ramp access and three development levels exist underground.

GEOLOGY: REGIONAL

The Aspen Grove geological district is located within the regional Quesnel Trough, a 30 to 60, km wide belt of Lower Mesozoic volcanic and related strata enclosed between older rocks and much invaded by batholiths and lesser intrusions (Campbell and Tipper, 1970). The southern part is the well-known Nicola belt which has been divided into western, central, and eastern belts on the basis of lithology and lithogeochemistry and by major fault systems. Variation from calc-alkaline to shoshinitic compositions from west to east has been interpreted to reflect eastward dipping subduction in the Nicola arc. The Vault 246374 Claim Group is situated within the eastern belt of the Nicola Group.

GEOLOGY: PROPERTY AREA

The geology on some of the more significant mineral MINFILE reported occurrences, prospects, and producers peripheral to the Tom Cat 1049441 Claim Group is reported as follows; the distance is from the Tom Cat 1049441 Claim Group.

TOM CAT prospect (Volcanic redbed-Cu; Subvolcanic-Cu-Ag-Au (As-Sb); Porphyry Mo (Low F-type)
MINFILE 092HNE056
Five kilometres south-southwest

This deposit is hosted in green laharic breccia or basaltic flow breccia near the contact with red laharic breccia of the Upper Triassic Nicola Group (Central belt, Bulletin 69). The unit strikes north-northwest and dips 60 degrees east. Massive basaltic flows outcrop to the northeast. Alteration of the breccia consists of some chloritization of olivine and pyroxene, and sericitization of feldspar.

Geology: Property Area *(cont'd)*

GOLDEN SOVEREIGN prospect (Volcanic redbed Cu)
MINFILE 092HNE072
100 metres south

A gentle ridge, trending north-northwest and lying between Tule Lake and Quilchena Creek, is underlain by a sequence of green and red volcanic and laharic breccias, with minor thinly-bedded green tuff, of the Upper Triassic Nicola Group (Central belt, Bulletin 69). The units strike northwest and dip 40 to 85 degrees southwest.

BIG SIOUX past producer (Volcanic redbed Cu; Alkalic porphyry Cu-Au)
MINFILE 092HNE073
Four kilometres west

The Fairweather Hills region is underlain by the Central volcanic facies of the Upper Triassic Nicola Group, comprising intermediate, feldspar and feldspar augite porphyritic pyroclastics and flows, and associated alkaline intrusions. The intrusions vary from diorite to monzonite in composition and are thought to be comagmatic with the Nicola Group, ranging in age from Late Triassic to Early Jurassic.

Locally, the area is underlain by red and green laharic breccias, augite andesite porphyry and minor sediments of the Nicola Group (Central belt, Bulletin 69). The units generally strike north-northwest and dip east. This sequence is broken up into a series of tilted fault blocks trending north. The occurrence is hosted in variably amphibole, augite and feldspar porphyritic basaltic andesite, subjected to extensive fracturing, shearing and faulting. Alteration minerals include abundant epidote, and minor silica and chlorite. Some microdiorite and diorite are also present.

BIG KIDD prospect (Volcanic redbed Cu; alkalic porphyry Cu-Au)
MINFILE 092HNE074
Three kilometres west

The deposit is located along the northern margin of an area of hilly upland situated in the centre of the Aspen Grove copper camp, known as the Fairweather Hills.

The Fairweather Hills region is underlain by the Central volcanic facies of the Upper Triassic Nicola Group, comprising intermediate, feldspar and feldspar augite porphyritic ash flows, and associated alkaline intrusions.

The intrusions vary from diorite to monzonite in composition and are thought to be comagmatic with the Nicola Group, ranging in age from Late Triassic to Early Jurassic.

Locally, the area is underlain by red and green laharic breccias, augite andesite porphyry and minor sediments of the Nicola Group (Central belt, Bulletin 69). The units generally strike north-northwest and dip east. This sequence is broken up into a series of tilted fault blocks trending north.

A vertical or subvertical breccia pipe, nearly circular in outline and about 300 metres wide, is developed in a body of fine- grained diorite, which may in part be recrystallized volcanics. The pipe consists of angular to subrounded clasts of volcanics, fine- grained diorite (microdiorite) and pinkish grey monzonite and syenomonzonite porphyry in a matrix of altered diorite intrusive material and finely comminuted rock. The fragments are 1 centimetre to several metres in diameter.

Geology: Property Area *(cont'd)*

COPPER STANDARD showing (Volcanic redbed Cu)
MINFILE 092HNE079
Two kilometres west

This occurrence is hosted in massive red augite andesite porphyry of the Upper Triassic Nicola Group (Central belt, Bulletin 69).

GOLDEN GATE showing (Volcanic redbed Cu)
MINFILE 092HNE080
Two kilometres west

Native copper, chalcopyrite, bornite, chalcocite, pyrite and cuprite occur in fractures in red laharic breccia, near the contact with green laharic breccia of the Upper Triassic Nicola Group (Central belt, Bulletin 69).

PAYCINCI prospect (Volcanic redbed Cu)
MINFILE 092HNE084
Two kilometres west

The deposit is located in the southern portion of an area of hilly upland situated in the centre of the Aspen Grove copper camp, known as the Fairweather Hills. The Fairweather Hills region is underlain by the Central volcanic facies of the Upper Triassic Nicola Group, comprising intermediate, feldspar and feldspar augite porphyritic pyroclastics and flows, and associated alkaline intrusions. The intrusions vary from diorite to monzonite in composition and are thought to be comagmatic with the Nicola Group, ranging in age from Late Triassic to Early Jurassic.

Locally, the area is underlain by red and green laharic breccias, augite andesite porphyry and minor sediments of the Nicola Group (Central belt, Bulletin 69). The units generally strike north-northwest and dip east. This sequence is broken up into a series of tilted fault blocks trending north.

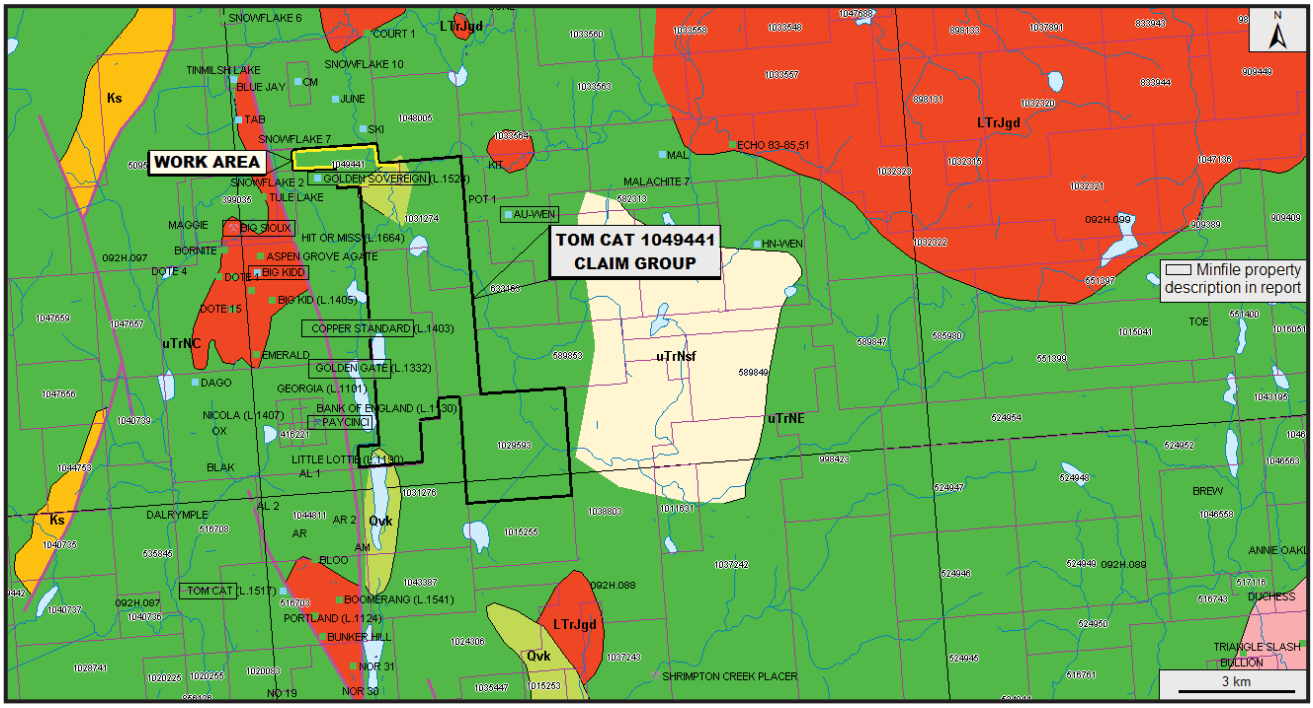
Hypogene and supergene copper mineralization occurs in green laharic breccia, near the contact with red laharic breccia to the east. This mineralization consists primarily of disseminated and fracture controlled chalcocite and native copper, accompanied by lesser malachite and azurite, and minor chalcopyrite, bornite, cuprite and pyrite. Drilling indicates chalcopyrite becomes more abundant at depth at the expense of chalcocite. This mineralization is exposed along the crest and east flank of a small northerly trending ridge, over a north-south distance of 400 metres.

ELK past producer (Intrusion-related Au pyrrhotite veins; Polymetallic veins Ag-Pb-Zn +/-Au; Au-quartz veins)
MINFILE 092HNE096
Fourteen kilometres east-southeast

The Elk property is underlain by Upper Triassic volcanics and sediments of the Nicola Group and by Middle Jurassic granites and granodiorites of the Osprey Lake batholith. The contact between these units trends northeasterly across the property. Early Tertiary feldspar porphyry stocks and dikes of the Otter intrusions occur throughout the property. The western property area is underlain by steeply west-dipping andesitic to basaltic flows, agglomerates, tuffs and minor siltstone and limestone units of the Nicola Group. The eastern half of the property is underlain by granitic rocks of the Osprey Lake batholith.

Figure 4 **Geology, Claim, Index & Minfiles**

(Base Map from MapPlace)



GEOLOGY MAP LEGEND

Pleistocene to Holocene

Qvk

unnamed alkalic volcanic rocks

Cretaceous

Ka

unnamed, undivided sedimentary rocks

Upper Triassic: Nicola Group

Eastern Volcanic Facies

uTrNE

basaltic volcanic rocks

uTtNsf

mudstone, siltstone, shale, fine clastic sedimentary rocks

uTrNMl

lower amphibolite/kyanite grad metamorphic rocks

uTrJum

unnamed ultramafic rocks

Central Volcanic Facies

uTrNc

andesitic volcanic rocks

Late Triassic to Early Jurassic

LTrJgd

unnamed granodiorite intrusive rocks

LTrJdr

dioritic to gabbroic intrusive rocks

Geology: Property Area *(cont'd)*

AU-WEN prospect (Intrusion-related Au pyrrhotite veins; Polymetallic veins Ag-Pb-Zn+/-Au)
MINFILE 092HNE144
One kilometre east

The AU occurrence is hosted in the Upper Triassic Nicola Group, which regionally consists of alkalic and calcalkalic volcanics and intrusions of island arc origin, and which is the principal component of the Quesnel Terrane in southern British Columbia (Geological Survey of Canada Maps 41-1989, 1713A). This belt has been of major economic interest because of its potential for porphyry copper-gold mineralization.

The occurrence lies in the northern assemblage of the Eastern belt of the Nicola Group (after Preto, Bulletin 69).

This assemblage mainly consists of well-bedded submarine volcaniclastic rocks, ranging from tuffaceous volcanic siltstones characteristic of the lower part, to coarse volcanic conglomerate and laharic breccias in the upper part. The assemblage is characterized by a paucity of intrusive rocks in comparison to the main Aspen Grove copper camp in the Central belt a few kilometres to the west, separated by the Kentucky-Alleyne fault system (Bulletin 69).

The AU occurrence is centred on the main gold showing, a small stripped, drilled and trenched area just off a gravel road south of Quilchena Creek (Assessment Reports 5766, 16008). This and most of the surrounding area is underlain by andesitic to dacitic tuff, cherty tuff, black argillite, and volcanic sandstone and siltstone. The rocks are strongly fractured in a variety of orientations. Bedding in the tuff has been measured to strike 060 degrees and dip 54 degrees northwest, but it varies.

About 1 kilometre to the north of the main showing is biotite hornblende granodiorite and quartz monzonite of the Early Jurassic Pennask batholith, and about 500 metres to the west are porphyritic andesitic and basaltic volcanic rocks (Bulletin 69; Assessment Report 16008). Small bodies of diorite and micromonzonite, possibly subvolcanic, are quite common in the area, on the surface and in drill core (Assessment Report 16008).

GEOLOGY: PROPERTY

As indicated by the BC government supported MapPlace geological map, the regional north trending Kentucky-Alleyne is adjacent west to the Tom Cat 1049441 Claim Group which is underlain predominantly by the Eastern Volcanic Facies *(UTrNE)* comprised of basaltic volcanic rocks. with a limited coverage of Pleistocene to Holocene alkalic volcanic rocks (Qvk) in the north and in the south.

There are no indicated outcrops of intrusive rocks within the Property area, however, a possible near surface intrusive is indicated by an oblong topographical feature within Tenure 1049441. The nearest intrusive rock to the Property is shown as a stock of granodiorite within one kilometer to the northeast.

West of the Property and the regional fault system, dioritic to gabbroic intrusive rocks outcrop within the Central portion of the Nicola Volcanics where the major portion of mineralization occurs.

The geology of the MINFILE reported showings and prospects within the Tom Cat 1049441 Claim Group is reported as follows.

MINERALIZATION: PROPERTY AREA

The mineralization on some of the more significant mineral MINFILE reported occurrences, prospects, and producers peripheral to the Tom Cat 1049441 Claim Group is reported as follows; the distance is from the Tom Cat 1049441 Claim Group.

TOM CAT prospect (Volcanic redbed-Cu; Subvolcanic-Cu-Ag-Au (As-Sb);
Porphyry Mo (Low F-type)
MINFILE 092HNE056
Five kilometres south-southwest

The laharic breccia is erratically mineralized with chalcocite, magnetite, bornite, chalcopyrite, native copper and hematite, as disseminations and fracture coatings. Trenching and diamond drilling has intersected this mineralization over a width of 30 metres and a depth of at least 45 metres.

One drillhole analysed 0.32 per cent copper over 45.7 metres (Minister of Mines Annual Report 1965, page 157, hole 1). Two chip samples assayed 2.4 and 1.6 per cent copper over 2.1 and 3.0 metres respectively (Minister of Mines Annual Report 1913, page 223).

GOLDEN SOVEREIGN prospect (Volcanic redbed Cu)
MINFILE 092HNE072
100 metres south

Copper mineralization is confined largely to one horizon of red breccia exposed near the crest of the ridge. The bed strikes 150 degrees, dips 60 degrees southwest, and is about 50 metres wide on surface.

Mineralization consists primarily of disseminated flakes of chalcocite and minor chalcopyrite, occurring in a zone up to 40 metres wide, near the contact with underlying green breccia. The zone is exposed periodically over a strike length of up to 400 metres. Some chalcopyrite is present in the green breccia, where the red and green breccias are faulted against each other.

Pyrite is also reported. A chip sample assayed 0.9 per cent copper, 0.7 gram per tonne gold and 10 grams per tonne silver over 4.6 metres (Minister of Mines Annual Report 1901, page 1180). A second chip sample assayed 0.25 per cent copper over 3.0 metres (Minister of Mines Annual Report 1913, page 222).

A second, possibly parallel zone of mineralization, 50 metres wide, is exposed about 100 metres west of the north end of the previous zone. A bed of impure limestone, 50 metres wide, separates the two zones. Here, the breccia exhibits some greenish yellow epidote, and yellowish white serpentine. The mineralized zone contains veinlets of chalcocite and blebs and nuggets of native copper up to 22 kilograms in size. Abundant chalcocite and native copper are concentrated along one prominent shear zone, 0.15 to 1.0 metres wide, striking 050 degrees and dipping 75 to 90 degrees southeast. Malachite and minor azurite are developed along two intersecting sets of fractures in the vicinity of the shear.

BIG SIOUX past producer (Volcanic redbed Cu; Alkalic porphyry Cu-Au)
MINFILE 092HNE073
Four kilometres west

Copper mineralization is exposed along a 300-metre long roadcut and in various old workings north of the roadcut, in an area 500 metres long and 300 metres wide.

Mineralization: Property Area *(cont'd)*

***Big Siou**x* *past producer (cont'd)*

Mineralization consists primarily of pyrite and chalcopyrite, as disseminations, blebs, fracture fillings, and in calcite and epidote veins. Pyrite also forms thin bands, comprising up to 25 per cent of the hostrock. Malachite occurs along fractures in many surface exposures.

Chalcocite forms fracture fillings in one prominent 1.8-metres wide shear zone, striking 075 degrees and dipping 75 degrees north. Minor bornite is also reported. One chip sample taken along the roadcut assayed 3.27 per cent copper, 14.45 grams per tonne gold and 34.1 grams per tonne silver over 10 metres (Assessment Report 20834, page 5). Channel sampling along a trench analysed 0.223 per cent copper, 0.106 gram per tonne gold and 1.26 grams per tonne silver over 27 metres (Assessment Report 7100, page 11, trench 4). A composite grab sample from the dump of a shaft, excavated in the chalcocite-bearing shear zone, assayed 12.6 per cent copper, 0.7 gram per tonne gold and 82 grams per tonne silver (Minister of Mines Annual Report 1901, page 1181).

BIG KIDD prospect (Volcanic redbed Cu; alkalic porphyry Cu-Au)
MINFILE 092HNE074
Three kilometres west

Mineralization is erratic and consists of abundant magnetite, and pyrite, lesser chalcopyrite, and traces of bornite and chalcocite, as disseminations, lenses, scattered blebs and veinlets.

Cuprite and native copper are also reported. This mineralization tends to favour the zones of alteration, but is not proportional to the intensity of alteration.

The sulphides are in part controlled by zones of shearing and fracturing in the northeastern portion of the deposit. Limonite, malachite and azurite are present at or near surface. Pyrite occurs primarily as disseminations up to 5 millimetres in diameter.

The mineral also occurs along fractures in association with chalcopyrite, orthoclase, quartz and/or carbonate. Chalcopyrite tends to be finely disseminated and is usually associated with magnetite, intimately associated with pyrite, and forms pseudomorphs after pyrite. Pyrite-chalcopyrite intergrowths are prevalent along fractures. Bornite is often found in magnetite-chalcopyrite blebs and veinlets, which often display epidote halos.

Channel sampling of an adit yielded 0.901 per cent copper, 0.141 gram per tonne gold and 13.66 grams per tonne silver over 14 metres (Assessment Report 7100, page 8, adit no. 1) Channel sampling of a trench, 90 to 190 metres west of the adit, yielded 0.237 per cent copper, 0.095 gram per tonne gold and 3.37 gram per tonne silver over 35 metres (Assessment Report 7100, page 9, trench no. 12). Trenching and sampling of the northern margin of the breccia pipe yielded gold values of up to 1.97 grams per tonne over 6 metres (Assessment Report 8743, Figure 3.)

COPPER STANDARD showing (Volcanic redbed Cu)
MINFILE 092HNE079
Two kilometres west

Mineralization consists of chalcocite, bornite, malachite, hematite and magnetite in seams and fractures, within a north- trending fracture zone. A grab sample assayed 0.7 gram per tonne gold, 206 grams per tonne silver and 8.8 per cent copper (Minister of Mines Annual Report 1928, page 223).

***Mineralization: Property Area** (cont'd)*

GOLDEN GATE showing (Volcanic redbed Cu)
MINFILE 092HNE080
Two kilometres west

Native copper, chalcopyrite, bornite, chalcocite, pyrite and cuprite occur in fractures in red laharic breccia, near the contact with green laharic breccia of the Upper Triassic Nicola Group (Central belt, Bulletin 69).

Similar copper mineralization is exposed in several pits and trenches some 300 to 400 metres south-southwest, on the Medal Fraction claim (Lot 1540). Here, the same red breccia contains native copper along fractures and minor disseminated chalcopyrite. A sample assayed 1.2 per cent copper, 0.7 gram per tonne gold and trace silver (Minister of Mines Annual Report 1901, page 1182). A chip sample taken across 3.0 metres assayed 0.5 per cent copper (Minister of Mines Annual Report 1913, page 223).

PAYCINCI prospect (Volcanic redbed Cu)
MINFILE 092HNE084
Two kilometres north

Hypogene and supergene copper mineralization occurs in green laharic breccia, near the contact with red laharic breccia to the east. This mineralization consists primarily of disseminated and fracture controlled chalcocite and native copper, accompanied by lesser malachite and azurite, and minor chalcopyrite, bornite, cuprite and pyrite. Drilling indicates chalcopyrite becomes more abundant at depth at the expense of chalcocite. This mineralization is exposed along the crest and east flank of a small northerly trending ridge, over a north-south distance of 400 metres.

Drill indicated reserves are 54,000 tonnes grading 0.876 per cent copper (Assessment Report 7654, page 1). Precious metal values are generally low. Six rock samples analysed 1.1 to 2.4 per cent copper, 0.005 to 0.010 gram per tonne gold and 1.3 to 5.7 grams per tonne silver (Assessment Report 14108, Figure 5, samples 2051 to 2056.

ELK past producer (Intrusion-related Au pyrrhotite veins; Polymetallic veins Ag-Pb-Zn +/-Au; Au-quartz veins)
MINFILE 092HNE096
Fourteen kilometres east-southeast

Gold-silver mineralization on the Elk property is hosted primarily by pyritic quartz veins and stringers in altered pyritic granitic and, less frequently, volcanic rocks. Crosscutting relationships indicate that the veins are Tertiary in age; they may be related to Tertiary Otter intrusive events.

To date, mineralization has been located in four areas on the Elk property: Siwash North, South Showing (092HNE261), North Showing (092HNE281) and Siwash Lake (092HNE041, 295).

The Siwash Lake zone is 800 metres south of the Siwash North deposit; the North Showing and South Showing areas are 2 and 3 kilometres south of Siwash North respectively.

In the Siwash North area, gold occurs in veins measuring 5-70 centimetres wide, hosted by a zone of strongly sericitic altered granite and, in the west, volcanic rocks.

In general, the mineralized zone trends east-northeast with southerly dips from 20-80 degrees (from east to west), and appears to be related to minor shearing.

Mineralization: Property Area *(cont'd)*

Elk *past producer (cont'd)*

Quartz veining occurs in a number of parallel to subparallel zones. Each zone consists of one or more veins within an elevation range of 5 to 10 metres that can be correlated as a group to adjacent drillholes. In the eastern parts of the area, up to six subparallel zones occur. Five of these zones are consistent enough to be labelled the A, B, C, D and E zones.

Mineralization in the west has been identified in one or locally two zones (the B and C zones). The main mineralized zone (B) is consistent, with only minor exceptions, across the entire drill grid.

The Siwash North structure has been tested to 335 metres downdip and along a strike length of 925 metres. The zone remains open to depth and along strike.

At surface, supergene alteration has leached out most of the sulphides with some pyrite and chalcopyrite remaining. Mineralization occurs primarily as native gold, occasionally as spectacular aggregates of coarse flakes in frothy quartz (strong pyrite boxwork) or in fractures in the vein.

Electrum was noted in one area as very coarse-grained flakes associated with strong manganese staining. Gold is rarely seen in boxworks in sericitic (phyllic) alteration.

In drill core, mineralization has not been affected by supergene processes. Metallic minerals in drill core include pyrite, chalcopyrite, sphalerite, galena, tetrahedrite, maldonite ? pyrrhotite and native gold in order of decreasing abundance). Gold is strongly associated with pyrite and with a blue-grey mineral. Photomicrographs show the gold commonly in contact with this mineral, which may be a gold-bismuth alloy (maldonite?) or a copper-bismuth- antimony sulphosalt.

Gangue mineralogy consists primarily of quartz and altered wallrock fragments. Ankerite is commonly present, with lesser amounts of calcite. Minor barite is also present. Fluorite was noted in one vein as very small (less than 1 millimetre) zoned purple cubes scattered in the quartz.

Stronger alteration generally accompanies higher grade gold mineralization. Seven main types of alteration were recognized in the granitic rocks throughout the property: propylitic, argillic, sericitic, potassium feldspar stable phyllic, phyllic, advanced argillic and silicic.

Locally, potassic alteration, skarnification and silicification are evident, but are relatively minor and do not appear to be related to mineralization.

Propylitic alteration is generally light green with biotite and hornblende altered to chlorite, and plagioclase is saussuritized. In volcanics, the colour is generally olive green, and the rock is soft. Argillic alteration is exemplified by bleached rock, with plagioclase white and clay-altered; potassium feldspar is slightly altered. Volcanics are bleached to light green or grey.

Sericitic alteration is typically pale green with a micaceous sheen, with plagioclase altered to sericite; trace disseminated pyrite may be present. This type of alteration is often associated with quartz veins and appears to be the lowest grade alteration associated with gold mineralization. It is not recognized in volcanics.

Potassium feldspar stable phyllic alteration is light pink, green or yellowish with potassium feldspar fresh and pink and blocky. Plagioclase and mafic minerals are altered to fine-grained quartz-sericite-pyrite. It often occurs with veins and is associated with gold mineralization; it is not recognized in volcanics.

***Mineralization: Property Area** (cont'd)*

***Elk** past producer (cont'd)*

Phyllic alteration is generally grey, fine-grained quartz-sericite-pyrite alteration usually associated with veins and often gradational to quartz and often auriferous. Advanced argillic alteration is exemplified by most or all of feldspar being destroyed, quartz is "free-floating". The alteration is often sheared and white in colour and is often associated with quartz veins. Volcanics are white or blue coloured. Silicic alteration is quartz veining or replacement that is hard with moderate conchoidal fracture. There is a strong symmetrical zoning of alteration around the quartz veins: vein-advanced argillic-phyllic-potassium feldspar stable phyllic-argillic-propylitic.

Measured geological reserves of the Siwash North deposit are 308,414 tonnes grading 22.17 grams per tonne gold and 24.68 grams per tonne silver using a cutoff grade of 10 grams per tonne gold. Reserves are based on results from 107 drillholes at 50-metre grid spacings along 804 metres of strike length to 304 metres downdip. All veining intercepts have been adjusted for true width and assays diluted to 2-metre mining widths (George Cross News Letter No. 223 (November), 1991).

The revised drill indicated reserve, based on more realistic open pit and underground mining widths of 0.39 to 0.79 metre with a 20.5 grams per tonne gold cutoff grade, is 122,458 tonnes averaging 54.5 grams per tonne gold (George Cross News Letter No. 65 (April 2), 1993).

Surface drilling was done on fences 10-50 metres apart, underground drilling on fences 10 metres apart. Reserve calculations by the company and consultant Roscoe Postle gave the following results (Explore B.C. Program 95/96 - A38):

Possible (undiluted) 50,260 tonnes at 66,400 tonnes at 42.0 g/t gold 31.4 g/t gold

Probable (undiluted) 16,991 tonnes at 28,200 tonnes at 50.2 g/t gold 26.6 g/t gold

The 1996 exploration program consisted of 6873 metres of drilling in 91 holes. The Siwash zone has been traced along a 914 metre strike length and down dip to 245 metres.

Reserves estimated by the company at January 1, 1996 were 121,350 tonnes grading 25.4 grams per tonne gold and 35.3 grams per tonne silver.

These include a diluted, probable open-pit resource of 11,340 tonnes grading 58.97 grams per tonne gold, an underground probable resource below the open pit of 20,225 tonnes grading 26.74 grams per tonne gold, and a further possible underground resource of 89,790 tonnes grading 23.66 grams per tonne gold (Information Circular 1997-1, page 21).

Surface diamond drilling totaling 1413.96 metres in 12 holes was completed on the Siwash Mining lease during 2000 testing the B, WD and Gold Creek West (GCW) zones.

A trenching program was carried out in 2001 in the Siwash East Area consisting of six trenches totaling 202 meters. Almaden Resources and Fairfield Minerals Ltd. merged into Almaden Minerals Ltd. in February, 2002.

In 2002, Almaden undertook a 26 hole surface diamond drill program for a total of 4995.67 metres testing the B, WD, GCW and Bullion Creek zones. During the 2003 field season a 6570 metre, 30 hole, diamond drill program was carried out by Almaden in the Siwash North area testing the WD zone. The WD vein system is located approximately 100 metres north of the Siwash B zone vein and has been tested over a strike length of 610m and down dip for 380m.

***Mineralization: Property Area** (cont'd)*

***Elk** past producer (cont'd)*

By the end of May 2004, a total of eight mineralized veins had been discovered on the property. Four vein systems had been drilled in the Siwash area: the B system with a strike length of 900 m has been tested down dip to 320 m; the WD zone with a strike length of 650 m has been tested to 370 m down dip; the GCW zone with a strike length of 300 m has been tested to 130 m down dip and the Bullion Creek (BC) zone which has been tested with two holes to a depth of 75 m.

A new 43-101 compliant resource was calculated using drill data for the Siwash B and WD veins, just two of eight known mesothermal vein structures on the property.

Global (bulk-tonnage and underground mineable) measured and indicated resources were reported to total 668,300 tonnes grading 9.66 grams per tonne gold (207,600 ounces) plus an additional 1,317,200 tonnes grading 4.91 grams per tonne gold (207,800 ounces) in the inferred category (News Release, Almaden Minerals Limited, May 28, 2004).

Included in the global figures is a higher grade, underground-mineable resource totaling 164,000 tonnes grading 33.69 g/t gold in the measured and indicated category, plus another 195 200 tonnes grading 16.38 g/t gold in the inferred category.

In 2004 a diamond drill program consisting of 10,265 meters of NQ drilling in 44 holes was completed. As reported by Almaden in 2001, a possible extension to the B and WD vein systems was found roughly two kilometres along strike to the east, on the other side of an area of overburden cover and no outcrop, as part of a trenching program. Grab samples of the vein material taken at surface returned averaged analyses of 31.6 grams per tonne gold and 104.4 grams per tonne silver (News Release, Almaden Minerals Limited, March 4, 2005. This discovery added about two kilometres of prospective, unexplored strike length to the high-grade vein system.

AU-WEN prospect (Intrusion-related Au pyrrhotite veins; Polymetallic veins Ag-Pb-Zn+/-Au)
MINFILE 092HNE144
One kilometre east

Pyrite, pyrrhotite, chalcopyrite and arsenopyrite are disseminated sporadically in the tuffaceous rocks and argillite, up to about 1 per cent, and also occur in fractures (Assessment Reports 11241, 16008). Native gold is associated with the sulphides in narrow quartz-filled fractures in these rocks (Assessment Report 16008)

Minor malachite occurs in volcanics. The overall extent of the mineralization has not been determined, although diamond drilling has demonstrated that minor pyrite, pyrrhotite and chalcopyrite, disseminated or associated with quartz or calcite fracture veinlets, does persist below the surface (Assessment Reports 11241, 16008).

Gold values in the area are generally low, but high values have been obtained from trench sampling and drill core at the main showing. Significant gold assays in chip samples range from 6.8 grams per tonne over 5.1 metres to 10.8 grams per tonne over 4.9 metres (Assessment Report 16008).

Grab and select samples assayed between 14.4 and 91 grams per tonne gold (Assessment Reports 5766, 16008). The best drill core intersection assayed 4.97 grams per tonne gold over 1.5 metres (Assessment Report 16008).

STRUCTURAL ANALYSIS

a) Purpose

The purpose of the structural analysis was to delineate any area of relative major fault intersections which location could be the centre of maximum brecciation and be depth intensive to provide the most favourable feeder zone to any convective hydrothermal fluids sourced from a potentially mineral laden reservoir. The fluid constituents and/or the indications thereof should be etched in the surface material; where by means of standard exploratory procedures, the source and location may be identified and a foundation on which to warrant any follow-up exploration.

These surficial indications such as prime minerals, indicator minerals, or alteration patterns, may be an expression of sub-surface mineralization that originated from a potentially developed mineral resource. Thus, a cross-structural location would be the prime area to initially prospect for the surficial indicators which may be revealed as pathfinder minerals, minerals and/or alteration products that would be subject to interpretation as economic mineral indicators.

b) Method

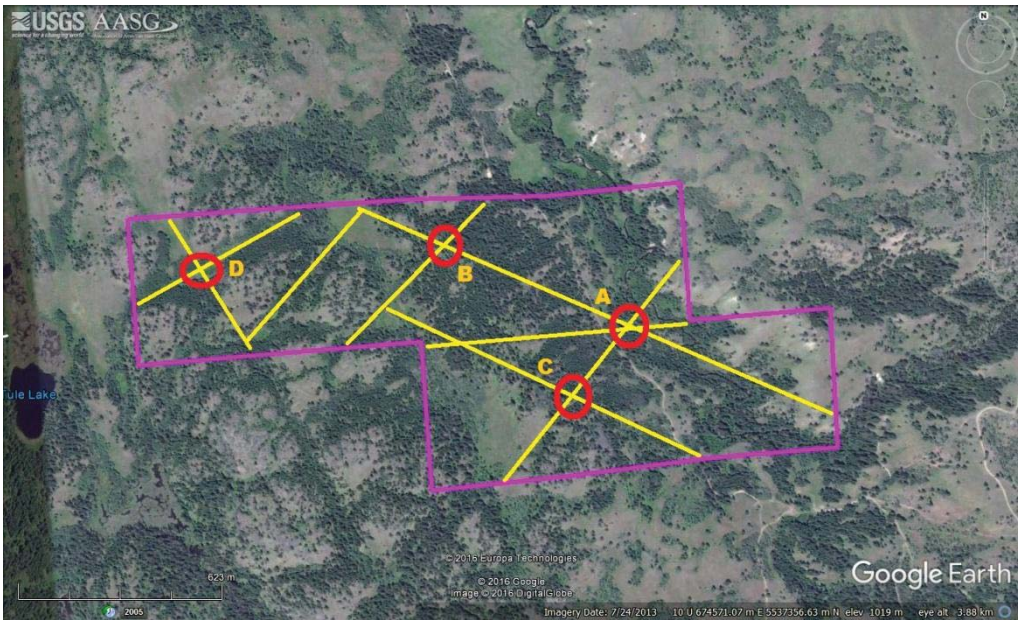
A DEM image hillside shade map downloaded from MapPlace was utilized as the base map for the structural analysis on Tenure 1049441. A total of 61 structurally indicated lineaments were marked, compiled into a 10 degree class interval, and plotted as a rose diagram as indicated on Figure 6.

The centre of the work area is at 5,537,290N, 674,538E (10NAD 83).

c) Results

Four cross-structural locations were delineated from major southwesterly trending structures intersected by northwesterly trending structures. The cross-structure is located within the Nicola volcanics and indicated approximately three kilometres from the 300 metre wide Big Kid breccia zone *(Minfile 092H.074).*

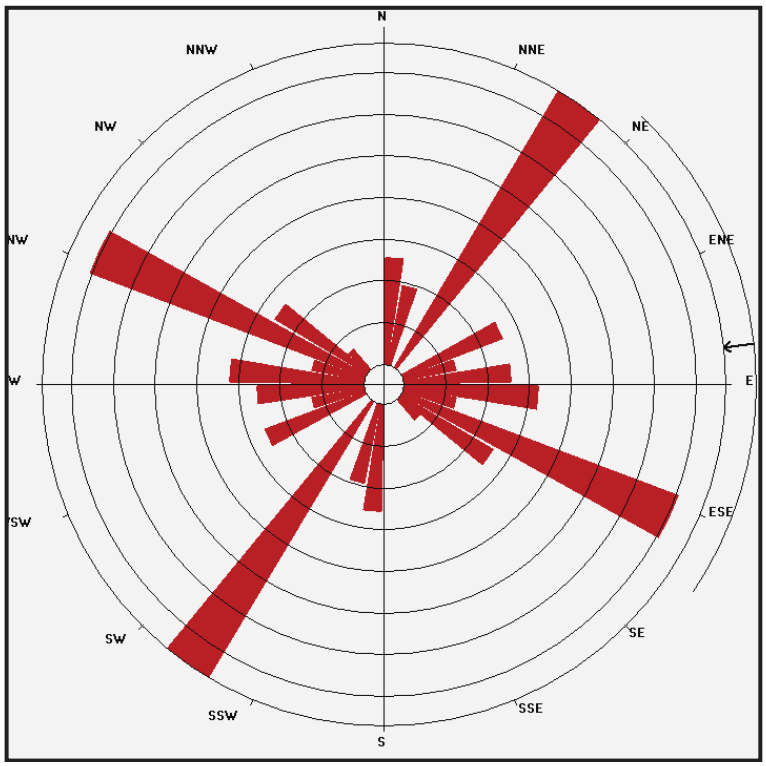
Figure 5. **Lineaments as indicated Structures on Tenure 1049441**
(Base map from MapPlace)



***Structural Analysis** (cont'd)*

Figure 6. **Rose Diagram from Indicated structures on Tenure 1049441**

(Based on Lineaments from Figure 5)



STATISTICS

Axial (non-polar) data
No. of Data = 52
Sector angle = 10°
Scale: tick interval = 3% [1.6 data]
Maximum = 23.1% [12 data]
Mean Resultant dir'n = 084-264
[Approx. 95% Confidence interval = ±40.1°]
(valid only for unimodal data)

Mean Resultant dir'n = 083.7 - 263.7
Circ.Median = not calculated
Circ.Mean Dev.about median = not calculated
(Not calculated if too many data, or data are axial (non-polar), and too coarsely grouped
Circ. Variance = 0.31
Circular Std.Dev. = 49.00°
Circ. Dispersion = 5.60
Circ.Std Error = 0.3282
Circ.Skewness = 2.13
Circ.Kurtosis = -4.29
kappa = 0.48
(von Mises concentration param. estimate)
Resultant length = 12.05
Mean Resultant length = 0.2317
'Mean' Moments: Cbar = -0.2262; Sbar = 0.0502
'Full' trig. sums: SumCos = -11.7601; Sbar = 2.61
Mean resultant of doubled angles = 0.3987
Mean direction of doubled angles = 045

(Usage references: Mardia & Jupp, 'Directional Statistics', 1999, Wiley; Fisher, 'Statistical Analysis of Circular Data', 1993, Cambridge University Press)
Note: The 95% confidence calculation uses Fisher's (1993) 'large-sample method'

***Structural Analysis** (cont'd)*

Figure 7. **Tenure 1049441 Cross-structures on Google Earth**

(Base map from Google Earth)

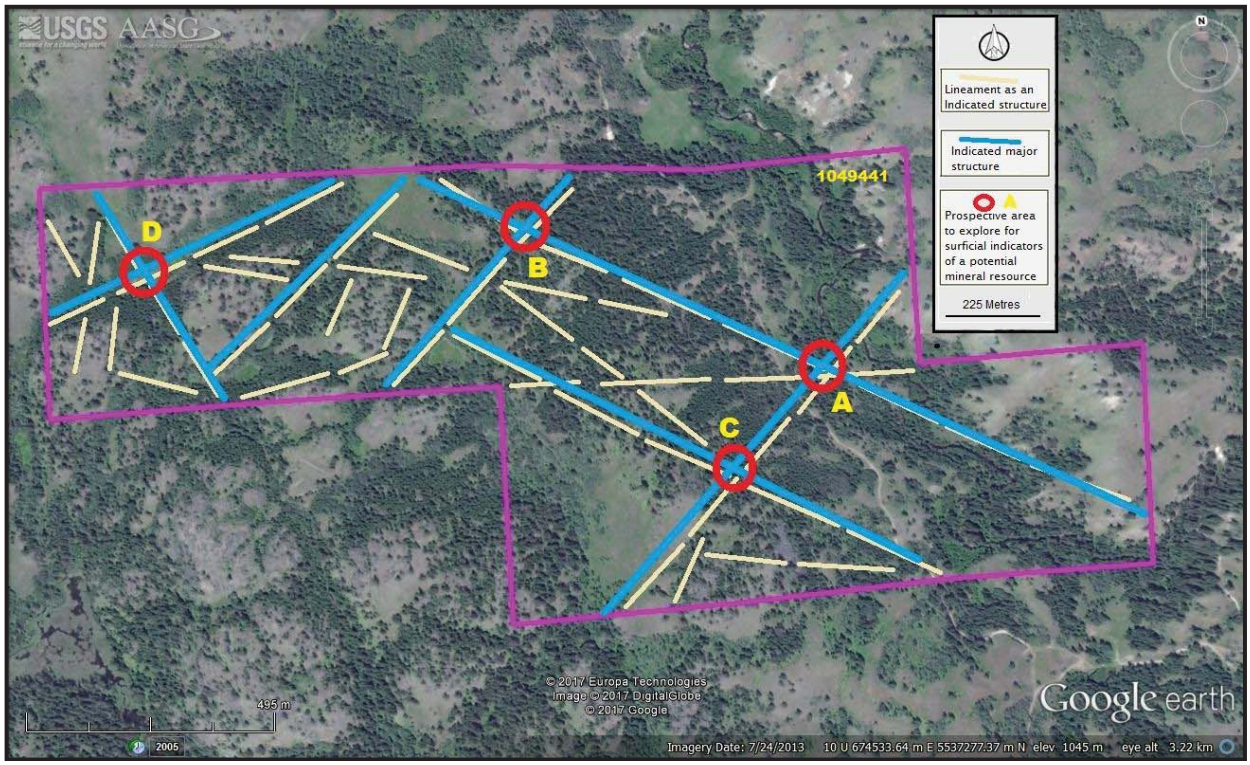


Table II. **Approximate location of cross structures on Tenure 1049441**

(UTM NAD 83)

Location	*UTM North*	*UTM East*	*Elevation (m)*
A	*5,537,290*	*674,968*	*899*
B	*5,537,574*	*674,332*	*1045*
C	*5,537,158*	*674,852*	*945*
D	*5,537,497*	*673,585*	*1078*

Magnetometer Survey

a) Instrumentation

A Scintrex MF 2 Model magnetometer was used for the magnetometer survey. Diurnal variations were corrected by taking repeated readings at a base point throughout the day. Magnetometer values are total intensity and relative.

b) Theory

Only two commonly occurring minerals are strongly magnetic, magnetite and pyrrhotite; magnetic surveys are therefore used to detect the presence of these minerals in varying concentrations. Magnetics is also useful is a reconnaissance tool for mapping geologic lithology and structure since different rock types have different background amounts of magnetite and/or pyrrhotite.

Magnetometer Survey *(cont'd)*

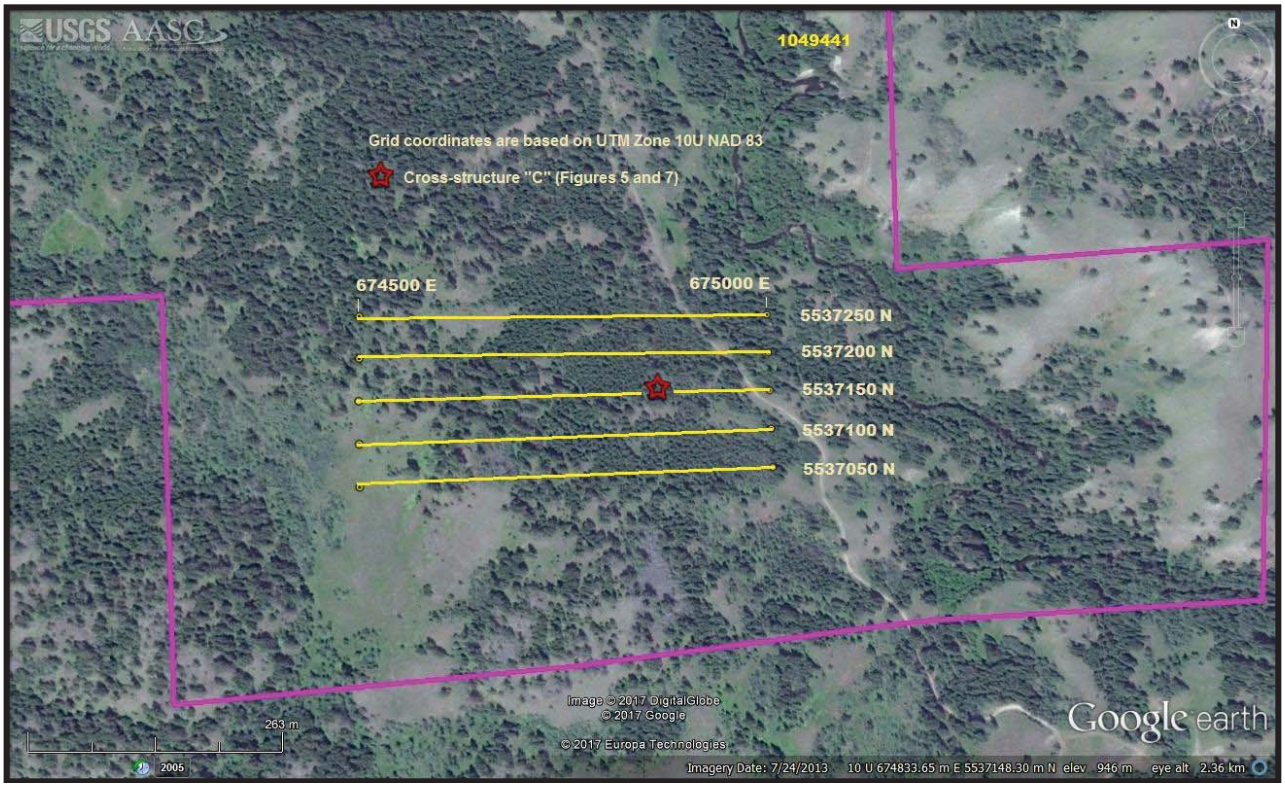
c) Survey Procedure

A 400 metre base line was established from 5537250N 675000E southward to 5537050N with base line stations at every 50 metres. From each of the five base line stations magnetometer readings were taken at 25 metre intervals westerly to 674500E. Line kilometres of magnetometer survey completed was 2.5. The field results are reported herein in Appendix I.

d) Data Reduction

The field results were initially input to an Exel spreadsheet whereupon a Surfer 31 program was utilized to create the maps exemplified herein as Figures 9, 10, & 11.

Figure 8. **Magnetometer Survey Grid**
(Base from MapPlace)



Magnetometer Survey *(cont'd)*

Figure 9 .**Magnetometer Survey Data**
(Base from MapPlace)

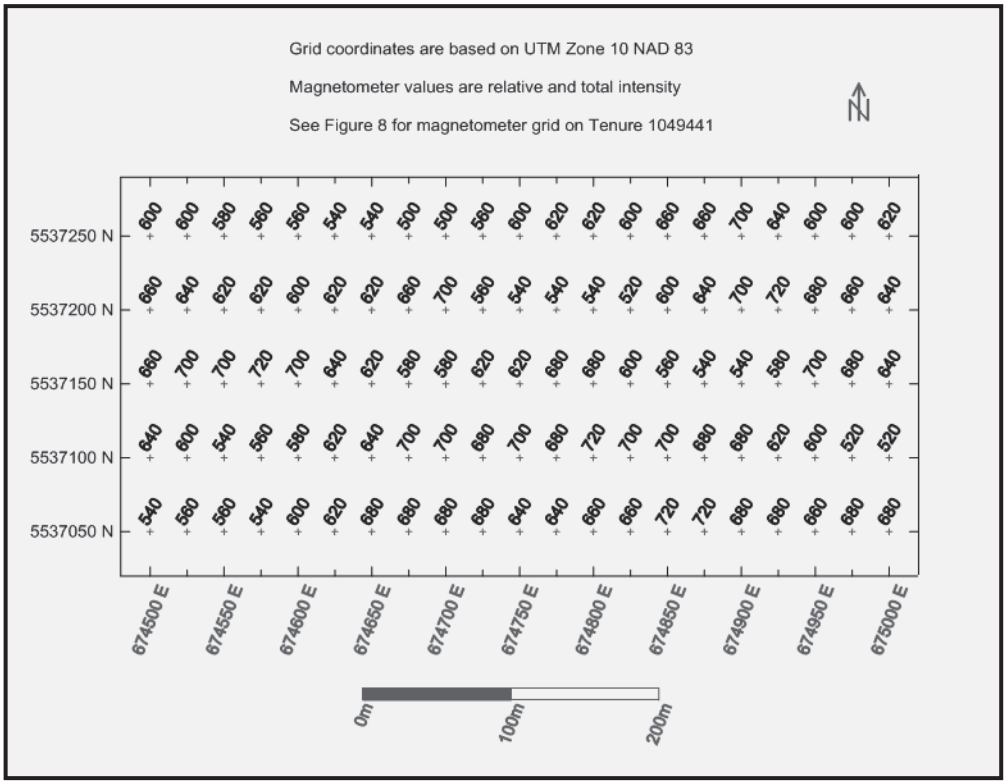
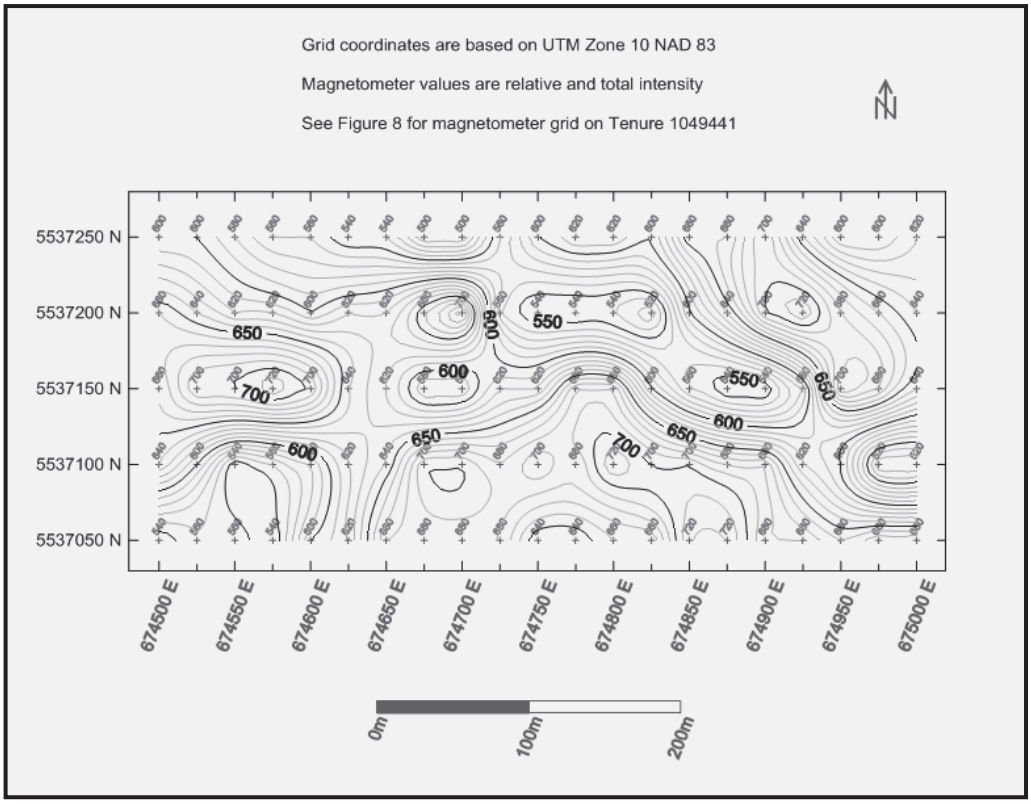


Figure 10. **Magnetometer Survey Data Contoured**



***Magnetometer Survey** (cont'd)*

e) Results

The magnetometer survey, which was indicated as being over Nicola volcanics (Figure 4), showed that the approximate location of cross-structure "C" is within a northwest trending, open-ended, relatively magnetometer LO zone with localized anomalous mag LO's. The approximate location of cross-structure "C" is correlative with a possible sub-anomalous mag LO with localized anomalous mag LO's 50 metres southeast and 50 metres northwest.

Should the mag LO zones indicate various degrees of hydrothermal alteration associated with structures, the northwest anomalous mag LO may indicate the location of a cross-structure where the alteration would be increased due to an increased zone of permeability.

Figure 11. **Magnetometer Survey Data Colour Contoured**

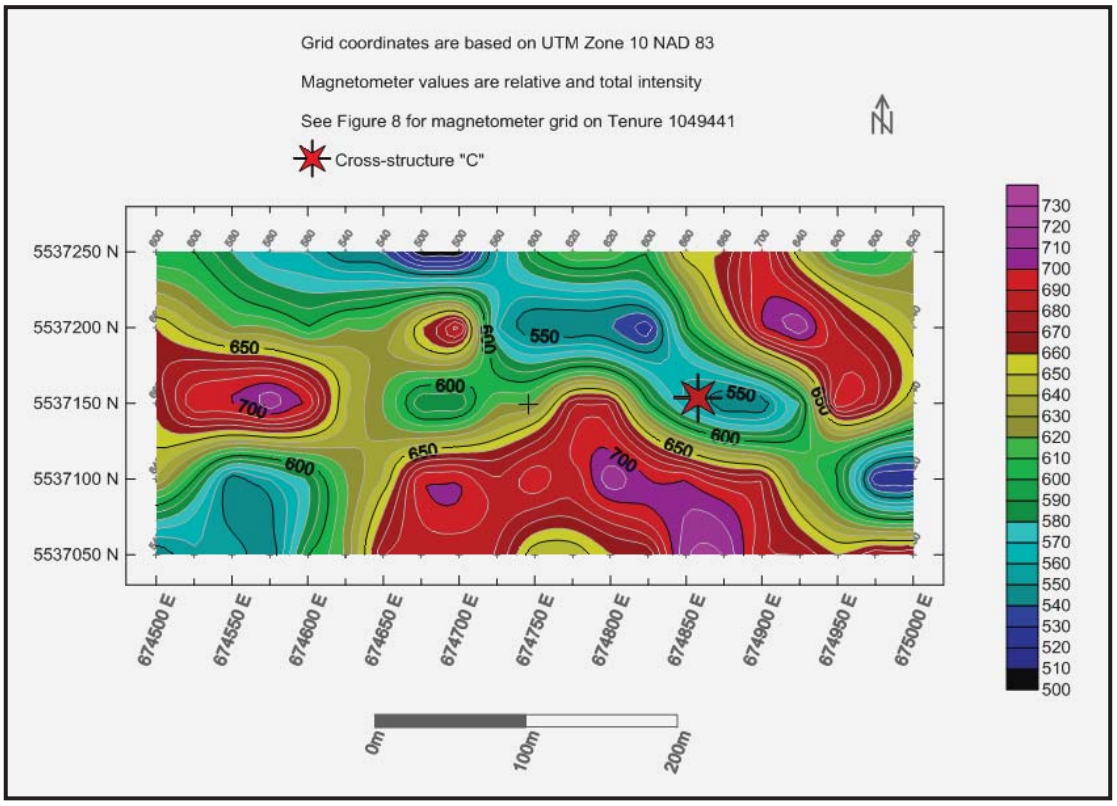


Figure 12. Copper Mountain Cross-Structures

(Note the mineral deposit locations within the Nicola Group proximal to the Nicola Group/Copper Mountain Intrusive

(Map from Giroux & Holbek, Figure 9.4)

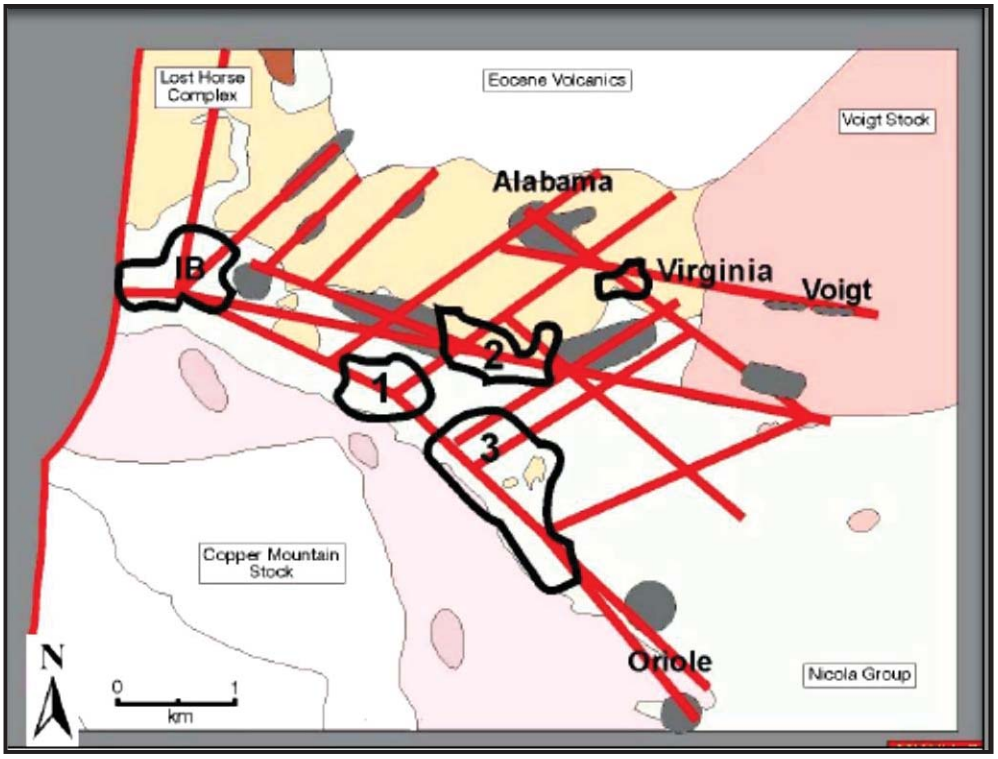
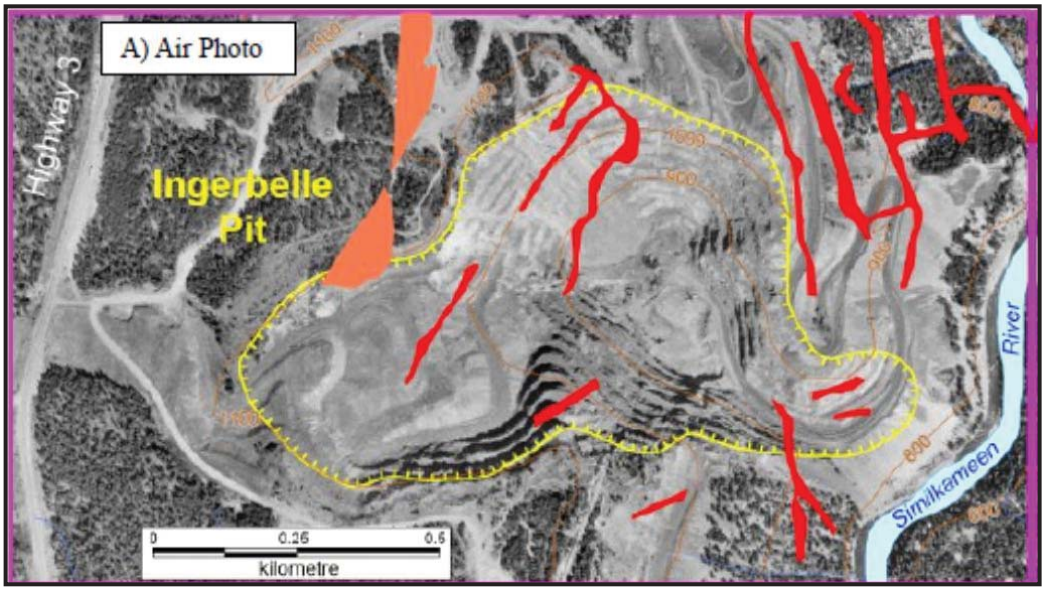
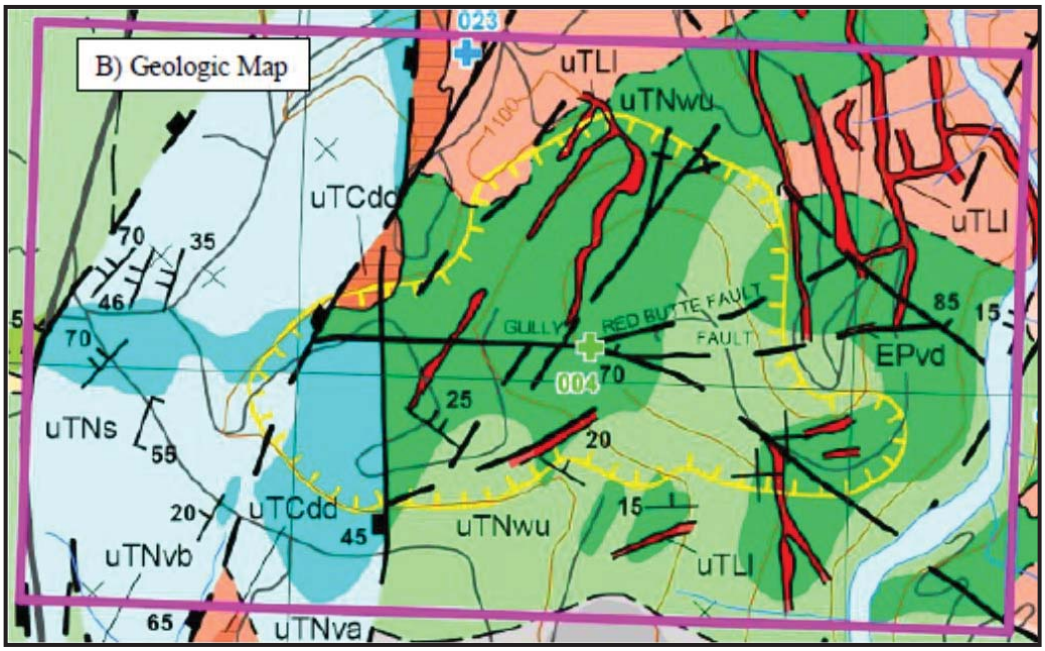


Figure 13. **Copper Mountain: Geology and cross-structure at the Ingerbelle open-pit**

(Note the mineral Ingerbelle location association with the Nicola Group/Copper Mountain Stock and the cross-structure centralized in the outline of the open-pit)

(Maps & Caption from Hasek, 2009 Figure 5)





INTERPRETATION and CONCLUSIONS

The significance of cross-structures is shown as the dominant structural control to the mineral control to the productive mineral deposits at Copper Mountain, 90 kilometres south of the Tom Cat 1049441 Claim Group, but also in the potential for a mineral resource such as at the Big Kidd mineral zone within three kilometres west of the Tom Cat 1049441 Claim Group.

At Copper Mountain, the Main Fault, a structure within a band of Nicola volcanics between two intrusives, is the dominant structure for the intersecting cross-structures controlling most of the productive mineral deposits at Copper Mountain *(Figure 12).*

At the Big Kidd prospect *(Minfile 092HNE074)*, cross-structures are indicated as a mineral control to the 300 metre wide breccia zone where a 71 metre drill intersection of 0.75 grams per tonne gold and 0.2 per cent copper was reported.

Of the four cross-structures delineated on Tenure 1049441, shown as being developed from indicated northeasterly and northwesterly trending structures, any one could also be a mineral resource controlling structure and would be a prime prospective area to search for surficial indications of a potential concealed mineral resource. Even though the cross-structures are within an area of indicated Nicola volcanics, the surficial Google map shows an oblong topographical feature in the northwest portion of Tenure 1049441 *(Figure 5)* that may indicate a near surface intrusive.

The localized magnetometer survey which incorporated the location of cross-structure "C", revealed a potential cross-structure in the two magnetometer LO zones. The zones are in a paralleling northwesterly and a northeasterly trend to the two cross-structures that develop cross-structure "C" with a correlative northwesterly trend.

As the location of cross-structure "C" is only approximate and the magnetometer values are only relative, both due to variable factors, the designated UTM location *(Table II)* would be only a focal point for possibly a general 100 square meter exploration area with a specific area guided by the progressively positive results for geological indicators to a concealed mineral resource. These geological indicators may be revealed as pathfinder minerals, minerals and/or alteration products that would be subject to interpretation as economic mineral indicators.

Thus, the priority locations for exploration within Tenure 1049441 would initially be the area of cross-structure "C", followed by the exploration of the other three cross-structural locations.

Respectfully submitted,

Sookochoff Consultants Inc.

Laurence Sookochoff, PEng

STATEMENT OF COSTS

Work on Tenure 1049441 was completed from June 16, 2016 to June 19, 2016 to the value as follows:

Structural Analysis		
Laurence Sookochoff, P Eng. 3 days @ $ 1,000.00/day ----------		$ 3,000.00
Magnetometer Survey		
Rick Pearson & Ross Heyer		
June 18-19, 2016		
Four man days @ $300.00 per day ----------	$ 1,200.00	
Truck rental: 2 days @ $145.00 ----------	290.00	
Kilometre charge: 340@ $0.70 ----------	238.00	
Fuel ----------	78.70	
Room & board 4 man days @ $90.00 ----------	360.00	
Mag rental 2 days @ $80.00 ----------	160.00	2,326.70
		$ 5,326.70
Maps ----------		750.00
Report ----------		3,200.00
		$ 9,276.70
		======

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092HNE084 – PAYCINCI
092HNE087 – BOOMERANG
092HNE088 – PORTLAND
092HNE089 – BUNKER HILL
092HNE166 – AM
092HNE177 – AR
092HNE256 – DALRYMPLE
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CERTIFICATE

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist and principal of Sookochoff Consultants Inc. with an address at 120 125A-1030 Denman Street, Vancouver, BC V6G 2M6.

I, Laurence Sookochoff, further certify that:

1) I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.

2) I have been practicing my profession for the past fifty years.

3) I am registered and in good standing with the Association of Professional Engineers and Geoscientists of British Columbia.

4) The information for this report is based on information as itemized in the Reference section of this report and from a Tom Cat property examination.

5) I have no interest in the Tom Cat property as described herein.

Laurence Sookochoff, PEng.

Appendix I

Magnetometer Data

E5635531 T1049441

East	North	Mag	East	North	Mag	East	North	Mag	East	North	Mag	East	North	Mag
674500	5537250	600	674500	5537200	660	674500	5537150	660	674500	5537100	640	674500	5537050	540
674525	5537250	600	674525	5537200	640	674525	5537150	700	674525	5537100	600	674525	5537050	560
674550	5537250	580	674550	5537200	620	674550	5537150	700	674550	5537100	540	674550	5537050	560
674575	5537250	560	674575	5537200	620	674575	5537150	720	674575	5537100	560	674575	5537050	540
674600	5537250	560	674600	5537200	600	674600	5537150	700	674600	5537100	580	674600	5537050	600
674625	5537250	540	674625	5537200	620	674625	5537150	640	674625	5537100	620	674625	5537050	620
674650	5537250	540	674650	5537200	620	674650	5537150	620	674650	5537100	640	674650	5537050	680
674675	5537250	500	674675	5537200	660	674675	5537150	580	674675	5537100	700	674675	5537050	680
674700	5537250	500	674700	5537200	700	674700	5537150	580	674700	5537100	700	674700	5537050	680
674725	5537250	560	674725	5537200	560	674725	5537150	620	674725	5537100	680	674725	5537050	680
674750	5537250	600	674750	5537200	540	674750	5537150	620	674750	5537100	700	674750	5537050	640
674775	5537250	620	674775	5537200	540	674775	5537150	680	674775	5537100	680	674775	5537050	640
674800	5537250	620	674800	5537200	540	674800	5537150	680	674800	5537100	720	674800	5537050	660
674825	5537250	600	674825	5537200	520	674825	5537150	600	674825	5537100	700	674825	5537050	660
674850	5537250	660	674850	5537200	600	674850	5537150	560	674850	5537100	700	674850	5537050	720
674875	5537250	660	674875	5537200	640	674875	5537150	540	674875	5537100	680	674875	5537050	720
674900	5537250	700	674900	5537200	700	674900	5537150	540	674900	5537100	680	674900	5537050	680
674925	5537250	640	674925	5537200	720	674925	5537150	580	674925	5537100	620	674925	5537050	680
674950	5537250	600	674950	5537200	680	674950	5537150	700	674950	5537100	600	674950	5537050	660
674975	5537250	600	674975	5537200	660	674975	5537150	680	674975	5537100	520	674975	5537050	680
675000	5537250	620	675000	5537200	640	675000	5537150	640	675000	5537100	520	675000	5537050	680